

Causes of death within a large, ethnically diverse South London HIV centre

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Background

- Cohort studies in the era of combination antiretroviral therapy (cART) of predominantly white HIV positive patients have shown a decrease in deaths from AIDS and a concomitant rise in deaths from serious non-AIDS events.¹ Late HIV diagnosis remains particularly common in black patients; the causes of death in this population remain less well defined.
- The London Boroughs of Lambeth and Southwark have the highest prevalence of HIV infection within the United Kingdom (13/1,000 and 10/1,000 respectively).² Sub-Saharan African and Afro-Caribbean populations account for 21.3% of the population and are over-represented in the burden of HIV infection.³

Objectives

- To describe the causes of death in HIV positive patients stratified by ethnicity, age, and time since HIV diagnosis.

Methods

- Data were collected retrospectively on all in-patient and out of hospital deaths (n=152) that occurred between January/2006 and December/2011.
- Cause of death was determined directly from patient records.
- We analysed the causes of death in our patients stratified by ethnicity (Black vs. White/other), age (<50 or >50 years), and by time from HIV diagnosis (<90 or >90 days after HIV diagnosis).

Results

- 152 patients (male: 106, female: 46) died during the period studied; the median age at the time of death was 43.5 (IQR 37.8-51.0) years, and the median CD4 count prior to death was 155 (IQR 37-294) cells/ μ l.
- 75 (49.3%) of deaths occurred in patients of black ethnicity; 106 (69.7%) in patients >50 years, and 29 (19.1%) within 90 days of HIV diagnosis.
- Overall, AIDS accounted for 29% of deaths (Fig 1) and for 42% of early deaths (<90 days of HIV diagnosis); AIDS was somewhat more common among black patients and those <50 years deaths.
- Liver disease was more common in white patients and cardiac/renal disease in black patients (Fig 2).
- The commonest cause of death in patients >50 years was non-AIDS malignancy; AIDS malignancies were also more common in those >50 years (Fig 3).
- Early deaths were more likely to be due to an AIDS (both OI and AIDS malignancies) than deaths occurring >90 days after diagnosis (59% vs 22%, p=0.0014) (Fig 4).

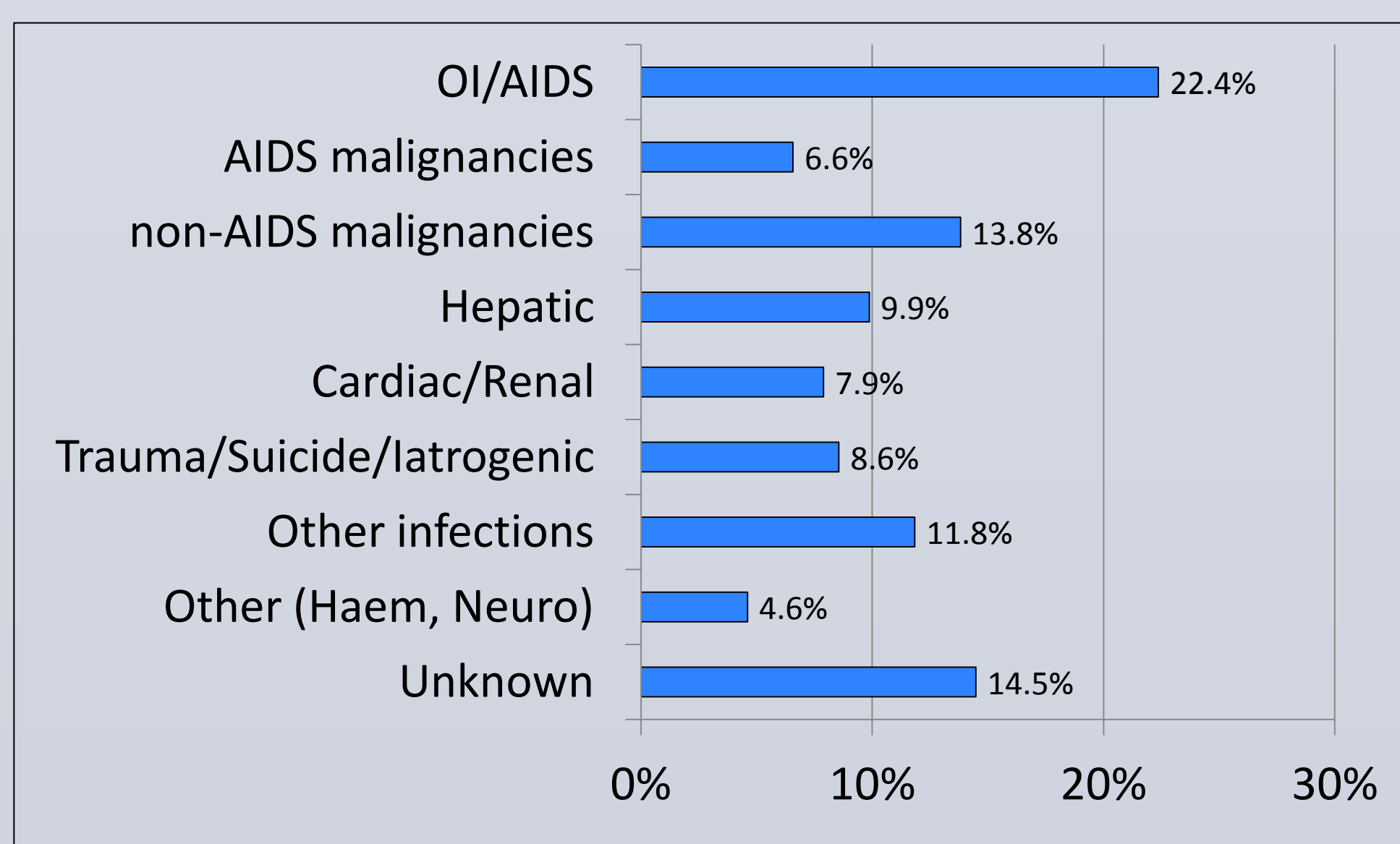


Figure 1: Causes of death in HIV-infected patients 2006 – 2011

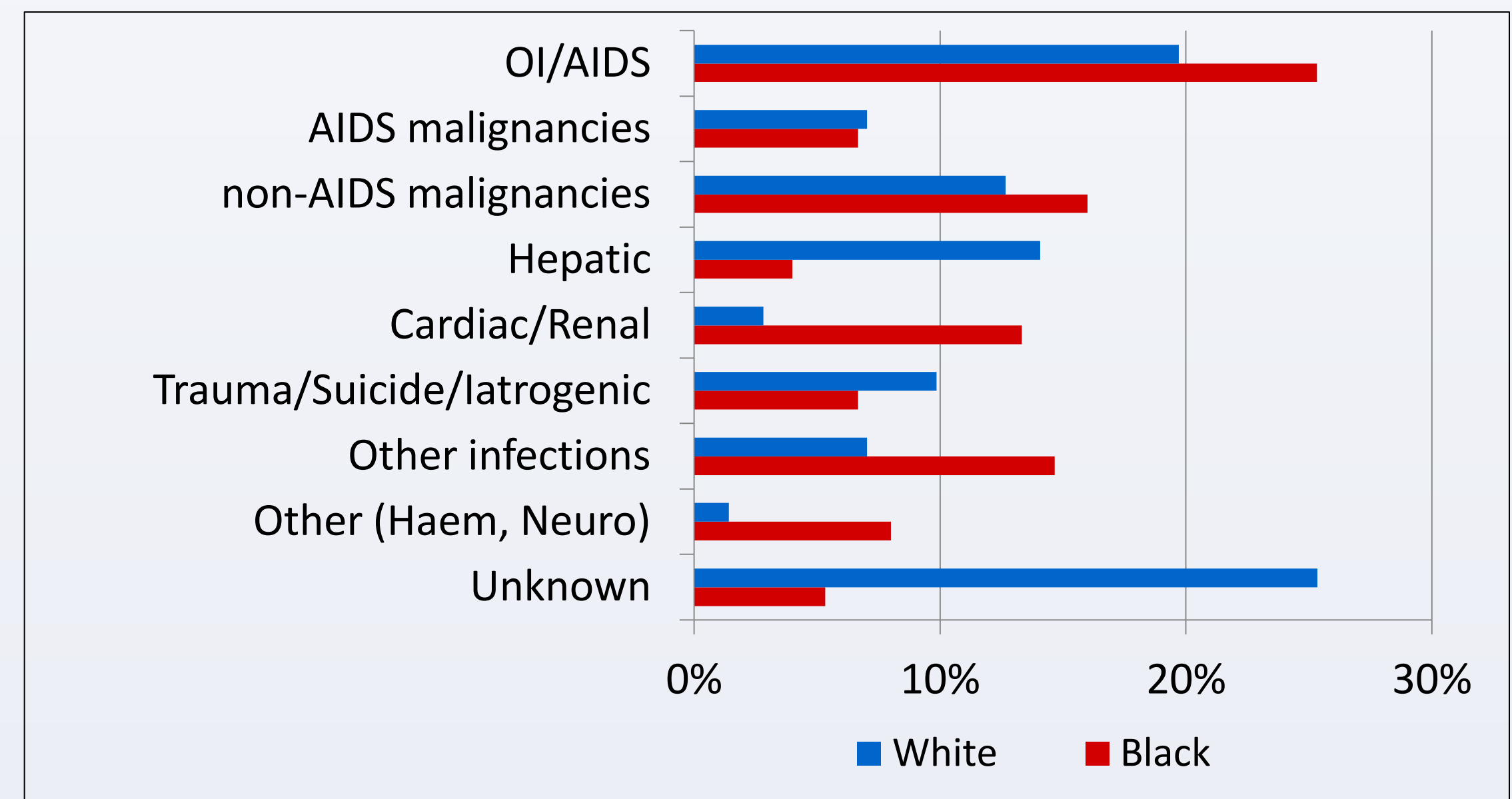


Figure 2: Causes of death stratified by ethnicity

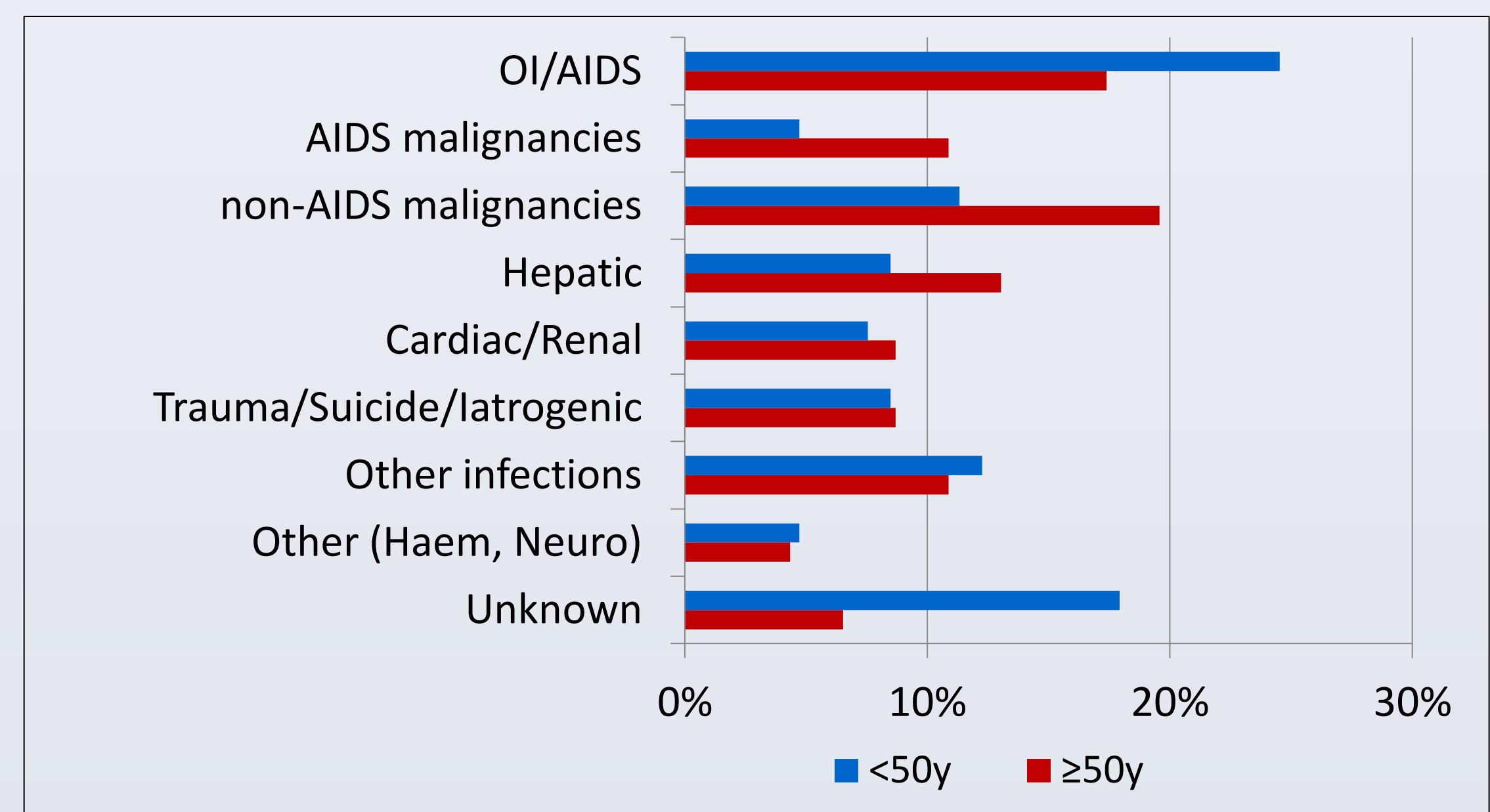


Figure 3: Causes of death stratified by age

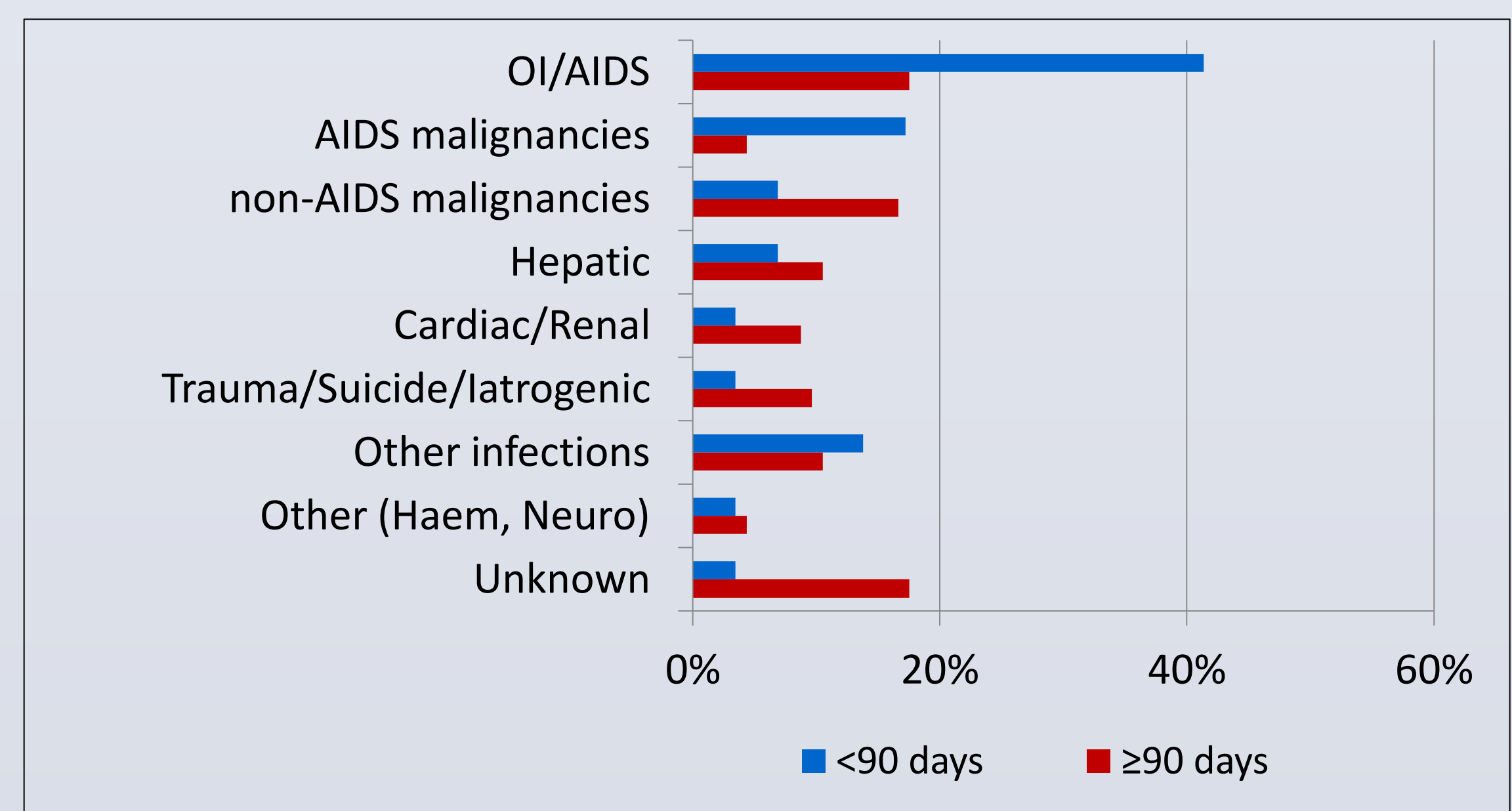


Figure 4: Causes of death stratified by time since diagnosis

Discussion and Conclusion

- In our cohort, ADIs remained the commonest cause of death overall, especially in patients under 50 years and those who died within 3 months of HIV diagnosis
- Consistent with observations in other cohorts, non-AIDS malignancy was the commonest cause of death in patients over 50 years
- Early diagnosis programs targeting ethnic minorities should be developed in an attempt to reduce the number of AIDS deaths

References

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